

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

YELLOWSTONE NATIONAL PARK

YELLOWSTONE PARK, WYO.

OF THE SUPERINTENDENT

April 9, 1919.

The Director,
National Park Service,
Department of the Interior,
Washington, D. C.

Sir:

I have the honor to submit my report of conditions
in the park for the month of March, 1919:

GENERAL STATEMENT.

The Yellowstone National Park was set aside by Act of Congress March 1, 1872, (Secs. 2474 and 2475, R. S., 17 Stat., 32) as a pleasuring-ground for the benefit and enjoyment of the people, and placed under the control of the Secretary of the Interior, who was authorized to make such rules and regulations as he deems necessary for the care and maintenance of the park. It is situated principally in northwestern Wyoming, but laps over a little more than two miles into Montana, on the north, and about two miles into Montana and Idaho on the west. Its dimensions are about 62 miles north and south, and about 54 miles east and west, giving an area of about 3,348 square miles, or 2,142,720 acres. Its altitude is 6,000 to 11,000 feet.

The park was governed by civilian superintendents, assisted by a few scouts, from the time it was set aside until August 10, 1896, when, under authority contained in the Sundry Civil Bill, approved March 3, 1893, at the request of the Secretary of the Interior, the Secretary of War detailed troops of United States Cavalry to protect it, the commanding officer acting as park superintendent under the direct orders of the Secretary of the Interior. On October 16, 1916, by mutual agreement of the heads of the Interior and War Departments, the troops were withdrawn from the park and their work of patrolling and protecting the park was again taken over by civilians selected for the purpose by the Secretary of the Interior. A clause contained in the Sundry Civil Bill, approved June 12, 1917, (Public No. 21, 65th Congress) made it obligatory to use troops for patrolling the park, and they were returned by the War Department on

June 26, 1917, relieving the park superintendent of so much of the duties as pertained to "protection". The Sundry Civil Bill, approved July 1, 1918, again made provisions for the employment of a force of civilian rangers to protect the park, and a force of twenty-five rangers was organized and took over this work at the end of the 1918 tourist season; and Fort Yellowstone was formally abandoned at the close of November 1, 1918.

The Act of Congress which appropriated funds for protection of the park, also placed the appropriations for maintenance and improvement under the Secretary of the Interior, instead of under the Secretary of War, as heretofore, and permitted the combining of all work under this office.

The local office of the U. S. Weather Bureau, Department of Agriculture, is in charge of Mr. G. E. Lawton, Observer. Temperature and precipitation records are also made by the rangers at several of the stations, for the Weather Bureau.

The United States Department of Justice is represented by Mr. John W. Meldrum, United States Commissioner, who is authorized to try all violators of park rules, regulations or laws. Mr. Meldrum has been away on leave since January 21st.

Park headquarters for all departments and most of the concessioners is located at Mammoth Hot Springs. 269 miles of telephone line connect headquarters with sub-stations. A hydro-electric power plant furnishes the light for buildings and grounds at headquarters. Water, electric current, and telephone service are furnished other departments of the Government in the park by the National Park Service, without charge. During March the hydro-electric power plant was run daily from 4:00 p.m. until noon, and was continued during the afternoon when any necessity existed for so doing.

CONDITIONS FOR THE MONTH OF MARCH.

The mean temperature was 29.2, which was 2.7 above normal. The total precipitation according to the weather reports was 1.00 inch of water, which is 1.18 inches less than the normal amount for March. Total snowfall for month, 9.8 inches. At the end of March snow laid on the ground in quantities as follows:

<u>Place.</u>	<u>Snow.</u>	<u>Water Content.</u>
Mammoth Hot Springs	0.0 in.	
Norris	21. "	4.45 in.
Riverside	13.	3.70 "
South Entrance	35.	6.30 "
Soda Butte	5.	2.35 "

A copy of the Monthly Meteorological Report is inclosed herewith.

EMPLOYEES.

The following-named regular employees were carried on the pay rolls during the month of March:

- 1 Chief Clerk (Acting Superintendent)
- 1 Purchasing Clerk and Special Disbursing Agent
- 1 Clerk, March 1st to 3rd, inclusive
- 4 Clerks ^{24-30.}
- 1 Assistant Engineer
- 2 Electricians
- 4 Assistant Chief Rangers
- 6 First-class Park Rangers
- 15 Park Rangers
- 2 Linemen
- 1 Plumber
- 2 Telephone Switchboard Operators
- 2 Foreman
- 1 Handyman
- 1 Laborer
- 1 Watchman

In addition to these, one assistant electrician was employed, temporarily, to assist in operating the power plant, pending certification of eligibles for appointment by the Civil Service Commission, and several carpenters, gas-enginemmen, chauffeurs, etc., were employed for temporary service, to keep up the work of construction and maintenance at headquarters and on the Gardiner Slide road.

DISTRIBUTION OF PARK RANGERS.

Assistant Chief Ranger James McBride (Acting Chief Ranger) was on duty at headquarters most of the month, working out from there. He also inspected two shipments of elk of 50 each, captured by Mr. Walter Hoppe under authority from the Department.

Assistant Chief Ranger James P. Brooks left headquarters on the 4th, accompanied by Ranger Purdue, and made an extended snowshoe trip to the Upper Yellowstone and the southeast corner of the park, returning to the Lake Station on the 24th. Then he continued on to the Old Faithful District to look up the game conditions in that vicinity. Park Ranger Purdue continued on to Headquarters via Canyon and Norris.

Assistant Chief Ranger Charles J. Smith was stationed at headquarters in charge of the Chief Ranger's office. He also made several motorcycle patrols, and did miscellaneous work at headquarters. He reports 500 elk in the vicinity of Mammoth Hot Springs.

Assistant Chief Ranger Harry Trischman made patrols from headquarters until the 24th, when he started on a snowshoe trip to Gallatin Station and down the west boundary to Riverside Station, and from there to the Upper Basin on a general trip of inspection in regard to the winter conditions of the game in that section. He reports 310 elk in the vicinity of the Upper Basin.

First Class Park Ranger B. C. Lacombe was stationed in charge of the Buffalo Farm, and was assisted by one laborer. He reports the death of one 10-year-old buffalo cow on the 8th. One buffalo bull with a broken leg on the 23rd was killed and the hide preserved, by order of the Acting Chief Ranger. The herd was fed hay continually during the month.

First Class Park Ranger Court B. Dowing was stationed at Gardiner. He made a specialty of hunting wolves and coyotes, but reports only one coyote secured. He put out 125 poison baits, however, most all of which were taken by coyotes; and undoubtedly many were killed. Ranger Dowing also made a

careful count of the elk on Mt. Everts, Black Tail Creek Range, and to the summit of the Geode Creek and Tower Creek Divide. His figures total 5677 elk, 13 sheep, 127 deer, and 237 antelope for this section.

First Class Park Ranger Peter Lawson was in charge of Gallatin Station in the northwest corner of the park. He made the patrols of this district, assisted by Ranger Douglas. The patrols extend south to Grayling Creek and northeast to Fan and Specimen Creeks and to Sportsman's Lake.

First Class ^{Park} Ranger Thad C. Pound was in charge of Gardiner Station, and made patrols as directed by Acting Chief McBride.

First Class Park Ranger Henry Anderson was in charge of Soda Butte District, and paid special attention to the extermination of predatory animals, killing 12 coyotes during the month. Ranger Anderson made a count of the elk in this district, getting a total of 5500 elk; and he counted 24 wild buffaloes on the Upper Lamar. He traveled 344 miles during the month. Ranger Winn ably assisted in the patrolling of this district.

First Class Park Ranger Roby Roy Wisdom was in charge of Lake District, assisted by Ranger Mazzanovich, and made patrols as directed by Assistant Chief Ranger Brooks.

Park Ranger Ford Purdy was in charge of Riverside Station, and made the patrols of that district, assisted by Ranger Townsend.

Park Ranger E. F. Cushman was in charge of Norris Station, patrolling that district; and he also made one trip to headquarters during the month. He counted 45 elk and 300 wild geese.

Park Ranger James H. Dupuis was in charge of Crevice Station. In addition to the patrols of his district, he made one snowshoe trip through Cottonwood Basin to Tower Falls Station and to headquarters, accompanied by Ranger Frazier. He reports 400 elk in the vicinity of Crevice Creek. Ranger Dupuis traveled 140 miles during the month on skis.

Park Ranger Frank J. Winess was in charge of Bechler River Station in the southwest corner of the park, and was assisted in the patrolling of that district by Ranger Russell.

Park Ranger J. W. Eline was in charge of Snake River Station. He made one snowshoe trip of about 130 miles during the month, starting on the 11th.

Park Ranger Chester B. Kelley was in charge of Tower Falls District. On the 4th he came to Gardiner and assisted Ranger McLaughlin on the north line until the 15th. On the 24th, with Ranger Frazier, he started on a snowshoe trip to the north line via Hellroaring Creek and east to Slough Creek, returning to Tower Falls via the Buffalo Farm on the 28th. He reports counting 2305 elk in his district.

Park Ranger A. L. McLaughlin, stationed at Gardiner, in addition to his patrols, made a careful count of the elk between Reece Creek and about one mile north of headquarters, the result being 957 elk, 225 antelope, and 64 deer. He shot one coyote. His total travel for the month amounted to 341 miles.

Other park rangers were stationed as follows:

William Wiggings, at headquarters, where he was kept busy at various kinds of work under the direction of the Acting Chief Ranger; Roy T. Frazier, at Crevice Station, except when on snowshoe trips (he made 164 miles on skis and 73 miles mounted during the month); Laurence Mazzanovich, at Lake Station; James Russell, at Bechler Station; William Purdue, on snowshoe trips with Assistant Chief Ranger Brooks during most of the month; E. J. Townsend, at Riverside Station; Geo. Winn, at Soda Butte Station; and Joseph Douglas, at Gallatin Station.

Hunter Steve Elkins worked from Tower Falls to Hellroaring Creek, and killed 7 coyotes. On Hellroaring Creek he counted 3000 elk.

Hunter Robert Harkins worked until the 15th of the month, and killed one coyote.

The total of the elk counted by the rangers on their districts, and not including Gallatin, Riverside, or those that have drifted out of the park on the north boundary, is 18694.

Other permanent employees were on duty at headquarters, maintaining office and storehouse, shops, telephone lines, power plant, buildings, water and sewer systems, etc.; and others were engaged in engineering and improvement work: remodeling buildings at headquarters, construction, etc., under the direction of Civil Engineer Goodwin.

Leaves of Absence: The following leaves of absence were granted during the month of March, 1919:

Electrician George P. Younger, regular annual leave, noon of March 14th to noon the 16th, $1\frac{1}{2}$ days.

Park Ranger James H. Dupuis, regular annual leave, noon of March 28th to end of 31st, $2\frac{1}{2}$ days.

Furloughs without pay: Clerk L. M. MacRae was granted two months' furlough without pay, effective at the close of March 3rd.

Appointments: No appointments became effective during the month of March.

Vacancies: The following vacancies existed in our regular force at the close of March, 1919:

- 1 Chief Ranger
- 4 Park Rangers
- 1 Assistant Electrician
- 1 Buffalo Keeper
- 1 Assistant Buffalo Keeper

Arrangements are being made with the Civil Service Commission to make permanent appointments to several positions now filled by temporary employees.

Purchase of War Savings Stamps: During March employees of this office purchased War Savings Stamps to the amount of \$255.92.

ANIMALS, DOMESTIC.

The saddle and draft animals not in use were kept on winter pasture at Yancey's, with one teamster in charge of the herd. It was necessary to feed some of the hay that was put up there for that purpose, during March.

GRADING.

GRAZING.

The winter grazing for elk, deer, sheep, and antelope continued first-class, and there was no necessity of feeding them at any point. About 50 tons of hay were fed to the tame buffalo herd, which had to be kept up on account of the disease that had previously broken out among it.

FOREST FIRES.

No forest fires occurred during the month.

FISH.

Fishing was reported fairly good in Madison and Gardiner Rivers.

MAINTENANCE AND IMPROVEMENT.

Aside from the work being done under contract, building a road around the Gardiner Slide, and the remodeling of buildings at headquarters, under the direction of Mr. Goodwin, but little improvement work was done.

The electricians were engaged in operating the power plant; the linemen kept the telephone lines in repair, and worked on repair of equipment; and the plumber did general maintenance and repair work on the plumbing systems. In addition, these employees did considerable work in connection with repairs and maintenance of physical improvements, under direction of Mr. Goodwin.

The work accomplished in the way of improvements and construction, under direction of Civil Engineer Goodwin, during the month of March was approximately as follows:

In general, during the month the work consisted of repairing transportation and other equipment and putting it in shape for next season's work. Some work was done on the stone stable which is being altered to house the machine shop and garage. Two of the steel bridges in the Gardiner Canyon, which were abandoned due to changing the location of the road, were taken down and yarded at a point convenient to the new road. The old 4-inch and 6-inch pipe lines, which were used

at the time when sluicing operations were being carried on at the Gardiner Slide, were taken apart and yarded at a point near the new road.

General office and engineering work was carried on, also the inspection and oversight of the contract work being done on the road in the Gardiner Canyon. The contractors, Gibbons and Reed Company, conducted their work under their contract approved November 4, 1918, for the construction of a road through the Gardiner Canyon. The weather for the month was very favorable, and good progress was made on the work. About 35 to 40 men were employed on this work during the month. Two of the six concrete culverts were finished, and two others were formed and made ready for pouring. The concrete and dry rock revetment walls were finished. The quantities allotted in the estimate for the month consisted of 11077.9 cu. yds. class 1 excavation; 1661.3 cu. yds. class 2 excavation; 301.3 cu. yds. class 3 excavation; 88.3 cu. yds. class 2, wet, excavation; 51.66 cu. yds. reinforced concrete in culverts; 274.2 cu. yds. loose laid rock wall; 26 lineal feet of 24-inch culvert pipe installed; and the taking down, moving, and erecting one 75-foot steel bridge.

While it is estimated that the work as a whole is now only 70 per cent completed in point of time, it is really much nearer completion, due to the fact that the greater part of the heavy excavating is about finished and that the concrete and dry rock revetment walls, which have caused delay in excavating, are now completed.

Unless adverse weather conditions cause delays, the work on the contract will be so far advanced by April 15th that the road may be opened to travel, and should be finished by May 1st except for some minor items such as cutting ditches, dressing slopes, and installing pipe culverts.

The office engineering work for the month consisted principally of work incidental to the carrying on of the Gibbons and Reed contract. Plans were made for the new mess wagons which are to be built for the use of the constructing and maintenance crews in the park.

MONIES TRANSMITTED.

The usual report of monies collected, due, transmitted, etc., together with money order and check, totaling \$28.80,

as called for in the reports on Forms 10-59 and 10-60, are inclosed. Please acknowledge receipt.

NATURAL PHENOMENA.

No changes were noted in the natural phenomena of the park during the month.

TRAVEL CONDITIONS.

Seven visitors registered at the north entrance during the month, as shown by the inclosed copy of Chief Ranger's Monthly Travel Report for March. Heavy snows during the last of February and the first of March blocked the temporary road to Gardiner, so it was impassable for any sort of conveyance on March 1st and 2nd; but the weather cleared, and it was opened on March 3rd, by shoveling out the drifts and by the use of a road grader. It has remained open ever since, although for several days it gave considerable trouble to motor vehicles on account of the spring thaws and its consequent muddy condition.

COMPLAINTS.

No complaints were received during the month.

WILD ANIMALS.

The weather and snow conditions for wild animals remained excellent, and all seen were reported in splendid condition.

Elk: A few thousand elk which left the park earlier in the winter are reported still to be ranging outside of the park, down the Yellowstone Valley in the Absaroka National Forest, although some of them returned to the park during March. Ranger Henry Anderson reports finding 11 elk killed by wolves in his district, but the losses thus far have been negligible. In connection with their patrols, the rangers in the most important districts during March made a count of the elk. The total number of elk seen, not including those in Gallatin and Riverside districts nor those now ranging outside of the park, amounted to 18694.

Two express shipments of elk, 50 in each shipment, were made during the month to the State Game Warden, Custer, South Dakota. Both shipments were accompanied by Deputy Game Warden P. L. Edholm of South Dakota.

Wolves and coyotes: Twenty-two coyotes were killed

during the month; but no wolves were killed. Hunter Robert Harkins was laid off on March 15th and Steve Elkins at the end of the month, as coyotes and wolves were becoming so scarce in their districts that it was not believed their further employment was warranted.

Mountain lions: Steve Elkins was employed with his trained dogs throughout the month hunting lions; and the fact that he secured none indicates that they are becoming very scarce. Mr. Elkins' services were valuable, however, as he killed 7 coyotes during the month.

Buffalo: One 10-year-old buffalo cow died on the 8th of the month; and one buffalo bull was killed on the 22nd on account of having a leg broken. The situation with regard to the hemorrhagic septicemia seems to have cleared up, though all precautions possible are still being taken.

PROTECTION AND CARE OF GAME.

The weather conditions continued to be very good during this month, and all game were able to procure plenty to eat without difficulty. The U. S. Forest Service continued its special efforts for protection of the elk which left the park and are yet wintering in the Absaroka National Forest.

SANITATION AND DISEASE.

No sanitary work was done during the month, except the removal of ashes, waste, etc., from the buildings at headquarters.

ARRESTS AND VIOLATIONS OF THE LAW.

No arrests were made during the month, and no violation of law was reported.

MISCELLANEOUS.

Moving picture shows have been held weekly for the general amusement of residents at headquarters.

PROPOSED WORK FOR APRIL.

Continued construction and repair of improvements under Civil Engineer Goodwin, under contract in Gardiner Canyon; and by the day on buildings at headquarters and the graveling of such parts of the road from Mammoth to Gardiner as may be necessary.

Maintenance and repair of buildings, water and sewer systems, power plant and telephone lines; and repair of equipment by shop force, and painting of motor vehicles.

Special care of animals, including feeding them when necessary, and patrols for poachers from all stations.

Very respectfully,

Leroy Hill,

Incls.

For the Acting Superintendent.